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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,649	12/04/2003	Sun Kyu Kwon	IPS-0016	6157
34610 7590 05/15/2007 KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200			EXAMINER HSIA, SHERRIE Y	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 05/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/726,649

**Applicant(s)**

KWON, SUN KYU

**Examiner**

Sherrie Hsia

**Art Unit**

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6 and 12-18 is/are rejected.
- 7) ☒ Claim(s) 3,5,7-11,19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.                                                |

## DETAILED ACTION

### *Drawings*

1. Figures 2-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "DVI decoder for receiving and decoding DVI video data to apply the decoded data to the output signal selector" claimed in claim 7 and "output signal selector ... the digital video data outputted from the switching unit ... converting units" claimed in claim 12 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

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be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. The disclosure is objected to because of the following informalities: On page 6, lines 11 and 12 should be deleted.

Appropriate correction is required.

### ***Claim Objections***

5. Claims 5 and 18 objected to because of the following informalities:  
In claim 5, line 3, "video decoder" should be --component processor--.  
In claim 18, line 2, "signal" should be --signals--.  
Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

“Output signal selector ... **the digital video data outputted from the switching unit** ... converting units” as claimed in claim 12 is not described in the specification. The specification never states that the output from the switching unit 416 is inputted to the output signal selector 426.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 6, 14, 15, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Reimers (5036395).

As to claims 1, 2, 6, 14, 15, 17 and 18, Reimers discloses the claimed features, the claimed data converting units are met by the A/D converters 13, 14, the decoders 5, 6, 9, 10 (the

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figure, column 2 line 53-column 3 line 7), the claimed output signal selector is met by the cross-bar switch 4 (the figure, column 3 line 5-column 4 line 65) and the claimed encoding unit is met by the encoder 7, 8, 11 or 12 (the figure, column 2 line 54-column 4 line 11).

As to claim 4, Reimers inherently discloses the claimed component processor (column 2 lines 56-64).

8. Claims 1, 2, 4, 6, 14, 15, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Vaughan (6229575).

As to claims 1, 2, 6, 14, 15, 17 and 18, Vaughan discloses the claimed features, the claimed data converting units are met by the A/D converters 38, the convergence functionality module 14 (Fig. 2, column 2 line 66-column 4 line 4), the claimed output signal selector is met by the MUXs 38 (Fig. 2, column 4 line 4-column 5 line 30) and the claimed encoding unit is met by the encoder 40, 42 (Fig. 2, column 4 line 5-column 6 line 30).

As to claim 4, Vaughan inherently discloses the claimed component processor (Fig. 2, column 3 lines 5-10, 53-63).

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reimers in view of Fig. 5 of applicant admitted prior art (AAPA).

Reimers does not show the claimed scaling process. However, Fig. 5 of AAPA shows the scaler. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Reimers by utilizing a scaler as taught by Fig. 5 of AAPA to scaling the digital data in order to provide good quality images.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vaughan in view of Fig. 5 of applicant admitted prior art (AAPA).

Vaughan does not show the claimed scaling process. However, Fig. 5 of AAPA shows the scaler. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Vaughan by utilizing a scaler as taught by Fig. 5 of AAPA to scaling the digital data in order to provide good quality images.

***Allowable Subject Matter***

11. Claims 3, 5, 7-11, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claims 12 and 13 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tagami (6437834) discloses video switching and mix/effecting equipment.

Saeger (5287188) shows a horizontal panning for wide screen television.

Sani (6429904) discloses a method for converting analog video signal to digital video signal having a digital video encoder.

Maeshima (4994913) shows a still picture transmission-display apparatus.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrie Hsia whose telephone number is (571) 272-7347.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Any response to this action should be mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Or faxed to:**

**(571) 273-8300**



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office whose telephone number is (571) 272-1000.



**Sherrie Hsia**  
**Primary Examiner**  
**Art Unit 2622**

SH  
May 11, 2007